

DOCKET FILE COPY ORIGINAL
Before the
Federal Communications Commission
Washington, D.C. 20554

RECEIVED

JUN 10 1999

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Implementation of the Local Competition)
Provisions in the Telecommunications Act)
of 1996)

CC Docket No. 96-98

Interconnection between Local Exchange)
Carriers and Commercial Mobile Radio)
Service Providers)

CC Docket No. 95-185

To the Commission:

REPLY COMMENTS OF
NETWORK ACCESS SOLUTIONS

Rodney L. Joyce
Shook, Hardy & Bacon LLP
600 14th Street, N.W., Suite 800
Washington, D.C. 20005-2004
Its Attorney

June 10, 1999

0021706.01

No. of Copies rec'd 0+12
List ABCDE

SUMMARY

In its opening comments, NAS showed that CLECs would be impaired in their ability to provide DSL service unless the Commission requires that ILECs provide five elements as UNEs for the provision of DSL service: (i) DSL-capable loops, (ii) frequency unbundled DSL-capable loops, (iii) transport, (iv) OSS, and (v) a combination loop/transport/packet switching element. ILECs would be required to provide this latter UNE only in a situation where the CLEC wants to provide DSL service to an end user whose loop is provisioned through a DLC.

In this reply, NAS offers evidence on six matters:

- Failure to require within the next few weeks that ILECs provide loops on a frequency unbundled basis may significantly reduce the opportunity for competition in the residential DSL market.
- The claim by one ILEC that CLECs would not be impaired without access to *any* UNE for provision of DSL service is based on two faulty assumptions.
- Regardless of whether CLECs would be impaired if they lacked access to *other* loop types, the record, including the ILECs' own admissions, make clear that the absence of DSL-capable loops would cause such impairment.
- CLECs would be impaired if the FCC adopted the ILEC proposal to require provision of a loop for DSL service only if that loop is DSL-capable without removal of load coils or excessive bridged taps.
- ILECs should be required to provide dedicated transport as a UNE because in numerous situations CLECs demonstrably have no source of supply for transport other than an ILEC as NAS's experience proves.
- Except for the specific situations that NAS described in its opening comments, ILECs correctly argue that their failure to provide DSLAM functionality as a UNE would not impair CLECs.

TABLE OF CONTENTS

	<u>Page</u>
I. Failure to Require Within the Next Few Weeks that ILECs Provide Loops on a Frequency Unbundled Basis May Significantly Reduce the Opportunity for Competition In the Residential DSL Market	3
II. The Claim that CLECs Would Not Be Impaired Without Access to <i>Any</i> UNE for Provision of DSL Service Is Based on Two Faulty Assumptions	6
III. Regardless of Whether CLECs Would Be Impaired If They Lacked Access to <i>Other</i> Loop Types, the Record, Including the ILECs' Own Admissions, Make Clear that the Absence of DSL-Capable Loops Would Impair CLECs	7
IV. CLECs Would Be Impaired If the FCC Adopted the ILEC Proposal to Require Provision of a Loop for DSL Service Only If the Loop Is DSL-Capable Without Removal of Load Coils or Excessive Bridged Taps	9
V. ILECs Should Be Required to Provide Dedicated Transport As a UNE Because In Numerous Situations CLECs Demonstrably Have No Source of Supply for Transport Other than An ILEC, As NAS's Experience Proves	10
VI. Except for the Specific Situations that NAS Described In Its Opening Comments, ILECs Are Correct in Arguing that Their Failure to Provide DSLAM Functionality As a UNE Would Not Impair CLECs	13
CONCLUSION	14

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Implementation of the Local Competition)	CC Docket No. 96-98
Provisions in the Telecommunications Act)	
of 1996)	
)	
Interconnection between Local Exchange)	CC Docket No. 95-185
Carriers and Commercial Mobile Radio)	
Service Providers)	

To the Commission:

**REPLY COMMENTS OF
NETWORK ACCESS SOLUTIONS**

Network Access Solutions ("NAS") is committed to becoming a premier supplier of telecommunications service in a highly focused product and geographic market. The company's product market is the provision of advanced data transmission services using DSL technology. The geographic market in which it provides service is Bell Atlantic's local exchange territory.

Although NAS began providing service on a commercial basis only this year, already it has operational collocation arrangements in 116 Bell Atlantic central offices. By September 1, it will have operational collocation arrangements in 322 central offices, and by the end of the year NAS will be collocated in more than 360 Bell Atlantic central offices in nine metropolitan areas.¹ These 360 central offices are equal to the total number of Bell Atlantic central offices in which *all*

¹ Boston, New York, Philadelphia, Pittsburgh, Wilmington, Baltimore, the District of Columbia, Richmond and Norfolk.

CLECs are collocated today.² Moreover, NAS collocates in the vast majority of the Bell Atlantic central offices in the nine metropolitan areas it will serve by the end of this year, not just in large central offices or those serving predominantly business customers.

In our opening comments, we urged the FCC to require that ILECs provide as a UNE to CLECs each of the five network elements that CLECs need in order to provide advanced services using DSL technology: (i) DLS-capable loops, (ii) frequency unbundled DSL-capable loops, (iii) transport, (iv) OSS, (iv) and (v) a combination loop/transport/packet switching UNE. We asked the Commission to mandate provision of the first four elements in all situations, and we asked the agency to mandate provision of the loop/transport/packet switching element only in a situation where a CLEC wants to provide DSL service to an end user whose loop is provisioned through a DLC. NAS showed in its opening comments that Section 251(d)(2) of the Act requires that ILECs provide these elements as UNEs since failure to do so would impair the ability of CLECs to provide advanced services to their customers using DSL technology.

Not surprisingly, ILECs seek in their opening comments to convince the FCC to exempt them from the obligation to provide CLECs with these five UNEs. But each of the arguments they make lacks merit as we show below.

² At present, CLECs have operational collocation arrangements in "more than 359 wire centers" in Bell Atlantic's territory. Bell Atlantic Comments, Aff'd. of Robert W. Crandall at 19.

I. Failure to Require Within the Next Few Weeks that ILECs Provide Loops On a Frequency Unbundled Basis May Significantly Reduce the Opportunity for Competition In the Residential DSL Market

Mandatory line sharing is the single most significant regulatory policy CLECs need in order to compete with ILECs in the vast residential DSL service market. Mandatory line sharing would (i) permit a CLEC to provide DSL service to an end user over the same loop that an ILEC uses to provide that user with exchange service, and (ii) require the ILEC to attribute to its retail DSL offering the same loop costs that it requires CLECs to pay when they use a frequency unbundled loop to provide DSL service. We showed in our opening comments that CLECs would be impaired without mandatory line sharing since ILECs then might monopolize the residential DSL market given that they would attribute *no* loop costs to their own retail DSL offering while requiring CLECs to pay from \$12 - \$18 (and in some cases even more) in loop costs per month for each loop the CLECs use in providing DSL service.³ It is hard to imagine how CLECs could compete with ILECs in the residential DSL market if ILECs are given that huge cost advantage.

Bell Atlantic's new term and volume discount plan for DSL service makes it essential that the Commission mandate line sharing within the next few weeks in order to preserve an ability for CLECs to compete in the residential DSL market.⁴ That plan gives ISPs the right to purchase Bell Atlantic's DSL service for resale to the ISPs' own end user customers at a significantly discounted price in return for a commitment to order a large amount of DSL service over a multi-year period. Bell Atlantic now is rapidly seeking to enter contracts under this plan with *all* major

³ See NAS Comments at 20-26.

⁴ See Bell Atl. Tariff FCC No. 1, §§ 16.8(F)4, and 16.8(G).

ISPs. CLECs may not be able to compete unless they can beat Bell Atlantic's price, yet without line sharing it is unlikely that any CLEC can beat the Bell Atlantic price. Moreover, unless CLECs can beat Bell Atlantic's price *before* Bell Atlantic obtains commitments from ISPs to subscribe to its term and volume pricing plan, there is a risk that ISPs will be unwilling later to subscribe to a CLEC's DSL offering even if adoption of mandatory line sharing a few months from now would make it possible for CLECs to beat the Bell Atlantic price. This is because once an ISP signs up to the Bell Atlantic plan, it is not likely that the ISP will purchase a substantial amount of DSL service from a CLEC given the large volume commitment it would have made to Bell Atlantic and the significant penalties it must pay to Bell Atlantic under the tariff if it fails to meet that commitment.

Because ILECs know that the Commission intends to make a decision in the present proceeding within the next few weeks, they will urge the agency to postpone a decision on the line sharing issue to its order in the *Advanced Services* proceeding rather than here given that a decision in the *Advanced Services* proceeding may not be made for several months.⁵ However, the Commission should resist the temptation to postpone its decision on mandatory line sharing until that time given the pressing need for action.⁶

In its comments, BellSouth disingenuously claims that failure to mandate line sharing will not impair CLECs on the theory that they can obtain loops from alternative loop suppliers if

⁵ See *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, First Report and Order and Further Notice of Prop. Rulemaking, FCC 98- 48 (rel. March 31, 1999) ("Advanced Services proceeding").

⁶ While the Commission has asked for comments on line sharing in that proceeding, it also asked for comments on line sharing in this proceeding. See UNE Remand Notice at ¶35.

ILEC loop prices are too high.⁷ This argument, of course, is absurd. BellSouth elsewhere admits that ILECs are the *only* source of loops for providing telecommunications services to most *residential* customers.⁸ ILECs are the only source of DSL-capable loops to serve *business* customers too since DSL service technologically can be provided *only* over copper transmission facilities, and copper transmission facilities are available *only* from ILECs.

There also is no merit to the claim that CLECs would not be impaired in the absence of mandatory line sharing on the theory that a CLEC providing DSL service may enter into a line sharing arrangement with another CLEC that provides exchange service.⁹ We showed in our opening comments that even if a CLEC could substantially reduce the loop costs applicable to its DSL offering in this manner, it *still* could not compete effectively with ILECs in the residential DSL market. While an ILEC can capture a residential end user as a DSL customer by convincing that user to subscribe to the ILEC's DSL offering *alone*, a CLEC desiring to compete in the residential DSL market under these terms would have to convince prospective DSL customers not only to subscribe to the CLEC's DSL service *but* also to subscribe to exchange service. Requiring that CLECs convince end users to subscribe *both* to exchange service *and* DSL service in order to compete with an ILEC in the retail DSL market would impair the ability of the CLEC to compete with ILECs in that market by raising CLEC costs to compete in a material way.

⁷ BellSouth Comments at 45-46. *See also* SBC Comments at 81.

⁸ BellSouth Comments at 72-73.

⁹ *Id.* at 46; SBC Comments at 83-84.

The allegation that mandatory line sharing is overly regulatory because it requires government regulators to set a price for the frequency unbundled data loop and the frequency unbundled voice loop lacks validity too.¹⁰ There is no need for government price setting. ILECs should be permitted to allocate the TELRIC-based loop cost between the two frequency unbundled loop types in whatever way they want as long as they attribute those costs to their own service offerings.¹¹

II. The Claim that CLECs Would Not Be Impaired Without Access to *Any* UNE for Provision of DSL Service Is Based on Two Faulty Assumptions

SBC tries in its opening comments to persuade the FCC to exempt ILECs from the obligation to make available to CLECs for the provision of DSL service any of the five UNEs that CLECs need in order to provide DSL service. According to SBC, a CLEC's failure to obtain these five UNEs would not impair its ability to provide DSL service within the meaning of Section 251(d)(2) given that CLECs could provide a different but (according to SBC) comparable service using cable TV or wireless technology.¹² But SBC's claim that failure to provide these five UNEs would cause no impairment is based on two erroneous assumptions. First, while SBC assumes that data transmission services provided by non-CLECs are comparable to the data transmission services that CLECs provide using DSL technology,¹³ they actually are *not* comparable -- in price, in functionality, in breadth of availability, or in the cost to provide them. Moreover, while SBC

¹⁰ SBC Comments at 84.

¹¹ See NAS Comments at 25-26.

¹² SBC Comments at 65-77.

¹³ *Id.* at 65.

assumes that the absence of ILEC market power in the provision of the DSLAM functionality necessary to provide DSL service justifies a finding of no impairment,¹⁴ that assumption is false as well. While ILECs generally do not have monopoly power in the provision of DSLAM functionality, they *do* have monopoly power in the provision of the five elements whose provision as UNEs NAS has requested, and all five of these elements are essential to the provision of DSL service.

III. Regardless of Whether CLECs Would Be Impaired If They Lacked Access to *Other* Loop Types, the Record, Including the ILECs' Own Admissions, Make Clear that the Absence of DSL-Capable Loops Would Impair CLECs

The Commission should require that ILECs provide DSL-capable loops as a UNE since many commenters explain why failure to do so *would* impair CLECs, and no commenter offers evidence that failure to do so would *not* impair CLECs. While all ILECs urge the FCC to exempt them from the duty to provide certain *other* loops as a UNE on the theory that doing so would not impair CLECs because they can obtain loops of those types from other suppliers, ILECs acknowledge that exempting them from the duty to provide *DSL-capable loops* would impair the ability of CLECs to provide DSL service since DSL-capable loops are available *only* from ILECs. For example, while several ILECs urge the Commission to exempt ILECs from the obligation to provide DS1-equipped loops and DS3-equipped loops in some situations on the theory that CLECs can obtain those types of loops from suppliers of fiber or wireless systems,¹⁵ ILECs admit that fiber

¹⁴ *Id.* at 66.

¹⁵ See Bell Atlantic Comments at 36-39 (requesting an exemption from the obligation to provide DS1-equipped loops and DS3-equipped loops provisioned from central offices where at least one fiber carrier or wireless carrier already provides such loops); SBC Comments at 23 (requesting an exemption from the obligation to provide DS1-equipped loops and DS3-
(continued...)

and wireless loops are *not* a substitute for DSL-capable loops since DSL-capable loops, by definition, are a subset of voice-grade copper loops.¹⁶ In addition, while BellSouth urges the FCC to exempt ILECs from the obligation to provide *voice-grade* loops in geographic areas where a cable TV operator uses its coaxial cable TV transmission equipment to provide exchange telephone service on the theory that CLECs then could obtain voice-grade loops from the cable operator,¹⁷ coaxial transmission facilities plainly are *not* comparable to DSL-capable loops since DSL service technologically cannot be provided over coaxial cable transmission facilities.¹⁸ Likewise, while ILECs urge the Commission to exempt them from the obligation to provide loops for serving any customer with more than 20 lines on the theory that CLECs can use existing fiber and wireless networks to serve those customers,¹⁹ fiber and wireless networks cannot be used to provide DSL

¹⁵ (...continued)
equipped loops provisioned from a central office in which at least one fiber CLEC is collocated and through which SBC itself provisions at least 40,000 loops).

¹⁶ See, e.g., US West Comments at 38, 57. A voice-grade copper loop is a DSL-capable loop only if the voice-grade loop contains less than 18,000 feet of copper (24,000 feet in the case of some types of DSL service), and only if it contains no load coils or digital loop carrier systems and no more than a specified amount of bridged taps. We express no view on whether fiber or wireless loops are an adequate substitute for DS1 (or higher capacity) loops provided by ILECs. We also express no view on the question of whether fiber or wireless loops are available from alternative suppliers in each of the situations that the ILECs assert they are available from such suppliers.

¹⁷ BellSouth at 72-73.

¹⁸ We express no view on the question of whether coaxial cable loops are comparable to voice-grade loops for provision of exchange service. We also express no view on the question of whether a cable operator should be deemed to be an alternative supplier of voice-grade loops for the provision of exchange service if it refuses to permit CLECs to use its coaxial cable plant.

¹⁹ Ameritech Comments at 100-02.

service given that DSL service technologically cannot be provided over fiber or wireless transmission facilities as indicated above.

IV. CLECs Would Be Impaired If the FCC Adopted the ILEC Proposal to Require Provision of a Loop for DSL Service Only If the Loop is DSL-Capable Without Removal of Load Coils or Excessive Bridged Taps

The Commission also should reject the request that it exempt ILECs from the obligation to provide a loop for provision of DSL service only if the loop is DSL-capable without removing load coils or excessive bridged taps.²⁰ This request should be rejected since granting that exemption would impair CLECs in providing DSL service given that loops are DSL-capable *only* if load coils and excessive bridged taps are removed. Nor is there merit in the claim that Section 251(c)(3)'s prohibition against requiring an ILEC to provide an "unbuilt [UNE that is] superior to the LEC's own facilities" bars the FCC from requiring that coils and excessive taps be removed.²¹ Section 251(c)(3) bars the FCC from requiring an ILEC to provide a particular loop only when the requested loop is both (i) presently "unbuilt" rather than part of the ILEC's "existing" network, and (ii) "superior [in] quality" to that which the ILEC uses itself. Requiring ILECs to remove coils or taps from a loop in order to make it DSL-capable meets neither condition. First, it requires only that the ILEC take action with respect to its "existing network" rather than an "unbuilt" one. Second, it does not require that the ILEC provide "superior quality" loops to those the ILEC uses itself in

²⁰ GTE Comments at 86-87; SBC Comments at 77-79.

²¹ GTE Comments at 86-87; SBC Comments at 77-79. *See Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 813 (8th Cir. 1997) (holding that Section 251(c)(3) permits the FCC only to require that ILECs to provide "unbundled access to an incumbent ILEC's existing network -- not to a yet unbuilt superior one").

providing exchange service since removal of coils or taps merely conforms a loop to a longstanding Bellcore technical specification applicable to loops used for telephony.²² Requiring an ILEC to remove coils or taps also does not constitute an unlawful demand to provide a superior quality loop because ILECs remove coils and taps from loops for their own exchange service business every day. For example, ILECs often remove coils when deploying DLCs in order to provide exchange service to new housing developments since the distribution portion of a loop provisioned through a DLC technologically cannot contain any coils. ILECs also remove coils or taps in order to provide T-1 service since some methods of providing T-1 cannot be provided over a loop with coils or excessive taps.

V. ILECS Should Be Required to Provide Dedicated Transport As a UNE Because In Numerous Situations CLECs Demonstrably Have No Source of Supply for Transport Other Than An ILEC, As NAS's Experience Proves

ILECs propose that the Commission adopt a variety of tests for determining situations in which ILECs would be exempt from the duty to provide dedicated transport. Each ILEC claims that adoption of the particular test it advocates would not impair CLECs on the theory that its preferred test defines situations where the CLEC has an alternative source for obtaining transport. In fact, we show below that adopting any of the proposed tests would impair NAS (and presumably most CLECs) because it would leave the company with no source of transport between numerous collocation sites that are essential to its business.

²² See BOC Notes on the LEC Networks - 1994, Issue 2, SR-TSV-002275 (Apr. 1994) (providing that no loop used for telephony containing less than 18,000 feet of copper, including bridged taps, should contain any load coil).

US West and Bell Atlantic advocate adoption of a test that would provide the most extensive exemption from the obligation of ILECs to provide transport. According to those companies, the Commission should exempt ILECs from the duty to provide dedicated transport in *all* situations since barriers to entry into the transport market are so low that CLECs can easily deploy their own transport when transport between any two specific sites is not available from a non-ILEC supplier.²³ In fact, others already have shown that requiring CLECs to negotiate rights-of-way and then construct transmission facilities to meet their transport needs would impair CLECs by significantly delaying their ability to provide service to areas where transport does not already exist and by requiring them to incur huge new capital construction costs.²⁴

Bell Atlantic proposes an alternative test for defining situations in which ILECs would be exempt from the duty to provide dedicated transport that is only slightly less expansive. Under this alternative test, ILECs would not be required to provide transport between two CLEC collocation sites if any other CLEC has run fiber transmission facilities into its own collocation arrangement at one of those sites.²⁵ While this proposed test recognizes that CLECs would be impaired if they must construct their own transport, its adoption would impair CLECs too since it wrongly assumes that CLECs will be able to obtain transport from one collocation site to another site from another CLEC merely because that other CLEC has run fiber into one of those sites. Just because a CLEC runs fiber into a given collocation site does not mean that it can provide another

²³ US West Comments at 52-53; Bell Atlantic Comments at 31.

²⁴ *See, e.g.*, AT&T Comments at 114-121.

²⁵ Bell Atlantic Comments at 31.

CLEC with a transport connection to any other specific collocation site. In some cases, the fiber may run only from that ILEC central office in which the fiber CLEC is collocated to a site other than another ILEC central office, such as a mid-span point at which its network connects to the ILEC's network. In other situations, the fiber either may not have sufficient transmission capacity to provide another CLEC with transport, or the CLEC with fiber may refuse to let another CLEC use that fiber for business reasons.

Even the test proposed by GTE -- the test whose adoption would provide the least expansive exemption from the duty of ILECs to provide transport -- would impair CLECs. Under that test, the Commission would exempt ILECs from the obligation to provide dedicated transport between any two CLEC collocation sites in ILEC central offices that serve more than 15,000 loops. According to GTE, exempting ILECs from the duty to provide transport in these situations would not impair CLECs since CLECs almost always can obtain transport from non-ILECs if the transport is needed to connect two ILEC central offices serving more than 15,000 lines.²⁶ In fact, in NAS's experience the ILEC typically is the only supplier of transport in these situations. Last month, NAS sent an RFQ for fiber transport to eight carriers with a fiber network in one or more of the nine metropolitan areas where NAS's 360 collocation sites are located. All of those collocation sites are Bell Atlantic central offices serving more than 15,000 loops. While NAS's network architecture requires that it obtain a transport link that connects each of these 360 collocation sites to another collocation site in a central office serving more than 15,000 loops, no carrier other than Bell Atlantic

²⁶ GTE Comments at 59-60.

submitted a bid to provide transport for 200 of these 360 transport links. For these 200 links, (more than 55 percent of the transport links that NAS requires), Bell Atlantic is the only supplier.

VI. Except for the Specific Situations that NAS Described In Its Opening Comments, ILECs Are Correct In Arguing that Their Failure to Provide DSLAM Functionality As a UNE Would Not Impair CLECs

While most ILEC proposals should be rejected, one of them should be adopted. ILECs argue that there is no need to promulgate a rule requiring that they provide DSLAM functionality as an unbundled UNE on a universal basis since failure to provide that functionality would not impair CLECs.²⁷ NAS agrees given that DSLAMs are widely available from a myriad of manufacturers, and substantially all CLECs that are serious about providing DSL service have purchased their own DSLAMs for collocation on ILEC property.

While some commenters ask the Commission to mandate universal provision of DSLAM functionality as a UNE since the CLECs that provide their own DSLAM functionality do not yet offer that functionality as a service to other CLECs,²⁸ the extent to which CLECs provide DSLAM functionality to other CLECs as a service is irrelevant. Except in the narrow circumstances described in NAS's opening comments,²⁹ the failure of ILECs to provide DSLAM functionality to CLECs as a UNE will not impair CLECs since CLECs can purchase and deploy their own DSLAMs.

²⁷ Bell Atlantic Comments at 40-41; Ameritech Comments at 118-19; BellSouth Comments at 34-36; GTE Comments at 73, 77-78; and US West Comments at 57-59.

²⁸ *See, e.g.*, Qwest Comments at 61-66.

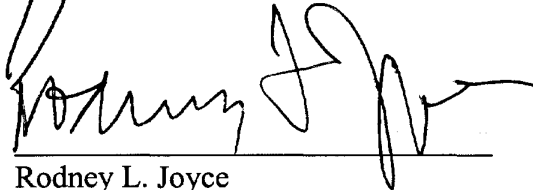
²⁹ NAS Comments at 26-31.

CONCLUSION

The Commission should require ILECs to provide five elements as UNEs for the provision of DSL service: (i) DSL-capable loops, (ii) frequency unbundled DSL-capable loops, (iii) transport, (iv) OSS, and (v) a combination loop/transport/packet switching element. The Commission should require that the first four UNEs be provided to all CLECs. It should require that the loop/transport/packet switching UNE be provided only in a situation where a CLEC wants to provide service to an end user whose loop is provisioned through a DLC.

Respectfully submitted,

NETWORK ACCESS SOLUTIONS
CORPORATION

A handwritten signature in black ink, appearing to read "Rodney L. Joyce", is written over a horizontal line.

Rodney L. Joyce
Shook, Hardy & Bacon LLP
600 14th Street, N.W., Suite 800
Washington, D.C. 20005-2004
Its Attorney

June 10, 1999

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing "Reply Comments of Network Access Solutions" was served on June 10, 1999, on each party named below.

Hand Delivery:

International Transcription Service
1231 20th Street, N.W.
Washington, DC 20036

Janice M. Myles
Common Carrier Bureau
Federal Communications Commission
445 12th Street, SW, Room 5-C327
Washington, DC 20554

By Mail:

Robert M. Lynch
SBC Communications, Inc.
One Bell Plaza, Room 3703
Dallas, TX 75202

Michael K. Kellogg
Kellogg, Huber, Hansen, Todd & Evans
1301 K Street, N.W., Suite 1000W
Washington, DC 20005
(Counsel for SBC)

John T. Lenahan
Ameritech
1401 H Street, N.W., Suite 1020
Washington, DC 20005

James G. Pachulski
Bell Atlantic Network Services
1320 North Court House Road
8th Floor
Arlington, VA 22201

Robert B. McKenna
US West, Inc.
1020 19th Street, N.W.
Washington, DC 20036

M. Robert Southerland
BellSouth Corp.
1155 Peachtree Street, N.E.
Suite 1800
Atlanta, GA 30309-3610

William T. Lake
Wilmer, Cutler & Pickering
2445 M Street, N.W.
Washington, DC 20037
(Counsel for UW West)

Mark C. Rosenblum
AT&T Corp.
295 North Maple Avenue
Basking Ridge, NJ 07920

David W. Carpenter
Sidley & Austin
1722 Eye Street, N.W.
Washington, DC 20006
(Counsel for AT&T)

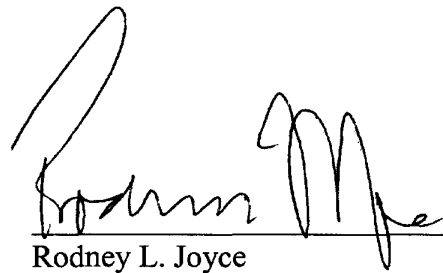
Ward W. Wueste, Jr.
GTE Service Corp.
1255 Corporate Drive
Irving, TX 75038

William P. Barr
GTE Service Corp.
1850 M Street, N.W., Suite 1200
Washington, DC 20036

Jeffrey S. Linder
Wiley, Rein & Fielding
1717 K Street, N.W.
Washington, DC 20006
(Counsel for GTE)

Genevieve Moelli
Qwest Communications Corp.
4250 North Fairfax Drive
Arlington, VA 22203

Linda L. Oliver
Hogan & Hartson
555 13th Street, N.W.
Washington, DC 20004
(Counsel for Qwest)



Rodney L. Joyce

June 10, 1999